

Executive Officer's Summary Report
9:00 a.m., April 23, 2009
River Lodge Conference Center
Chinook Room
1800 Riverwalk Drive
Fortuna, California

Item: 4

Subject: Public Hearing on Order No. R1-2006-0045 to consider Amending NPDES Permit No. CA0022764 in the matter of the **Monitoring and Reporting Program, Santa Rosa Subregional Water Reclamation System**, Sonoma County, WDID No. 1B830990SON

DISCUSSION

The City of Santa Rosa (hereinafter City) is currently discharging municipal wastewater under National Pollutant Discharge Elimination System (NPDES) Permit No. CA0022764 and North Coast Regional Water Quality Control Board (Regional Water Board) Order No. R1-2006-0045 adopted on September 20, 2006 and revised on July 24, 2008 respectively. Provision VI.B.2 of Order R1-2006-0045 allows the City to propose receiving water monitoring locations different from those specified in section VIII of the Monitoring and Reporting Program (MRP). The City has proposed new receiving water monitoring locations for the discharge from Delta Pond, has requested to waive the filter loading rate requirements contained in section IV.C.1 of Order R1-2006-0045, and has requested to change the annual report submission date from February 1 to March 1 each year.

In response to the City's requests, Regional Board Staff reviewed Order No. R1-2003-0026 and proposes changes from the existing permit in Order No. R1-2009-0045, including:

1. Modification to Adopt Alternative Receiving Water Monitoring Program Proposal

Background: Order No. R1-2006-0045 requires that receiving water monitoring locations, in order to demonstrate compliance with surface water limitations, must be located "before the monitored flow joins or is diluted by any other waste stream, body of water, or substance." At the public hearing, the Regional Board added a provision to the Order (Provision VI.B(2)) that allowed the City to submit within 180 days of the permit effective date an alternative receiving water monitoring program for the consideration of the Regional Water Board Executive Officer and, if deemed acceptable by the Executive Officer, for possible later incorporation into permit language by the Regional Water Board at a public hearing. The City submitted a proposal for an alternative receiving water monitoring plan on May 7, 2007. The

Regional Water Board Executive Officer granted conceptual approval of the alternative program by letter dated August 7, 2007. The City submitted its final proposal, titled *Receiving Water Quality Limit Compliance Assurance and Monitoring Plan*, on January 22, 2009 (See Attachment E-5).

As described in Attachment E-5, the City proposes that compliance with surface water limitations associated with Discharge Point 012B for dissolved oxygen, pH, turbidity, and temperature be determined based on the results of a water quality model. The site-specific water quality model uses ambient receiving water conditions and discharge quality, both measured continuously by instream monitoring devices, to calculate an allowable waste discharge from 012B that would meet surface water limitations contained in Order No. R1-2006-0045. The City would then set its discharge flow rate not to exceed the calculated allowable waste discharge. The City will be deemed in violation of the respective surface water limitation when a daily discharge causes the model output(s) to exceed the limitation. The Model outputs represent the constituent concentrations or values at monitoring location R-018 defined as the edge of the zone of initial dilution. The surface water nutrient samples will not be determined by the Model, but rather will be grab samples just upstream from the confluence of the Laguna de Santa Rosa and Santa Rosa Creek at monitoring location R-019. The proposed changes to the Order and MRP include requirements for model validation including verification of model accuracy. The approach to verification is included in Attachment E-6.

Compliance with surface water limitations at discharge points other than Discharge Point 012B will be determined at locations in the receiving water "before the monitored flow joins or is diluted by any other waste stream, body of water, or substance."

Justification: The model has been reviewed and accepted by Regional Water Board staff and will allow the Regional Water Board staff to make a daily determination of compliance with surface water limitations associated with Discharge Point 012B. The use of this model is an innovative approach to adaptively manage the discharge and should help avoid all receiving water violations outside of the zone of initial dilution. The determination to allow the submission of an alternative monitoring program for future Board consideration was contemplated by the Regional Water Board and adopted at a public hearing on September 20, 2006. This permit modification adds explicit compliance language to the Compliance Determination section of the existing Order (Section VII) for surface water limitations associated with Discharge Point 012B.

2. Modification to the filter loading rate requirements contained in section IV.C.1 of Order R1-2006-0045

Background: The City is involved with the *Filter Loading Evaluation for Water Reuse* (FLEWR), which is a research project sponsored by the National Water Research Institute and the Water Reuse Foundation to determine filter performance at flow rates above the maximum 5 gpm/ft² allowed under Title 22 Water Recycling Criteria.

The Department of Public Health determined that the results of Phase I of the FLEWR demonstrated that loading rates up to 7.5 gpm/ft² may meet Title 22 turbidity performance and virus removal objectives.

The City submitted two documents on March 3, 2008 a *Waiver Request for a Filter Loading Evaluation for Water Reuse Phase II Study* and an *Engineering Report for Recycled Water Production at Higher Filter Loading Rate*. That same day, the Department of Public Health submitted a document supporting the City's request for a waiver subject to certain conditions.

Justification: Since Title 22 contains requirements managed by the Department of Public Health, the existing language in the Order was overly restrictive by not allowing appropriate exceptions such as "other methods of treatment" that are provided for under Section 60320.5 of the Water Recycling Criteria. The proposed amendments to the language in the Order ensure consistent water quality protection by allowing alternative loading rates that are supported by the Department of Public Health and subject to Executive Officer approval.

3. Modification to MRP General Monitoring Provisions I.C and I.D

Justification: The existing language contains apparent contradictions that require clarification and simplification to ensure adherence to Water Code Section 13176. Provision I.C requires lab certification, but provides an exception if QA/QC protocols are in place. Provision I.D then requires all analyses to be performed by a certified lab. The proposed provision replaces both existing provisions with the following language:

I.C Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

4. Modification to the Annual report submission date from February 1 to March 1 each year

Justification: The City requested the submission date change due to conflicts with other requirements on February 1 and there are no water quality based concerns regarding the request.

5. Elimination of five discharge points

Justification: The City proposed to eliminate discharge points 002, 005, 008, 009, 016 and associated monitoring locations due to its ability to control discharge through the remaining locations. This simplifies the discharge options and is more protective of water quality.

6. Modification to General Monitoring Provisions in MRP

Justification: The City described the need for a finding to include an exception for sampling requirements due to weather induced safety hazards. Staff concurs that the new monitoring locations (R-018 & R-019) have the potential for safety hazards during large storm events that would require such an exception.

7. Response to comments

The City of Santa Rosa offered verbal comments, which have been addressed with minor modifications to the noticed draft order.

A copy of the draft permit modifications was mailed to interested agencies and persons and a public comment period was noticed in the local newspaper as well as on the Regional Water Board website. Verbal questions/comments were received from the Russian River Waterkeeper and from Brenda Adelman. After discussions with staff, both parties had no objections to the amendment. Verbal comments were received from the City. After consideration of these comments, Regional Water Board staff made minor changes to the draft Order.

PRELIMINARY STAFF
RECOMMENDATION:

Adopt the Order as proposed.